In Reissue Application: Serial No.: 09/143,503 In Reexamination Control No.: 90/004,946

Amendment B dated December 22, 2005

Statement of Status of All Claims (37 CFR 1.173(c))

After the present amendment, the claims (clean text) and their status are as follows.

1. (Pending) A balloon dilatation catheter comprising:

a) a proximal catheter shaft portion formed at least in part of an extruded

engineering thermoplastic polymeric material with a tensile strength greater than 10,000

psi, an elongation greater than 50% and a tensile modulus greater than 300,000 psi,

having proximal and distal ends and having a first inner lumen extending therein to the

distal end;

b) a distal catheter shaft portion being more flexible than the proximal catheter

shaft portion, having proximal and distal ends and a second inner lumen extending from

the proximal end of the distal shaft portion to a location proximal to the distal end of the

distal catheter shaft portion and being in fluid communication with the first inner lumen

extending within the proximal catheter shaft portion; and

c) an expandable dilatation balloon on the distal catheter shaft portion having an

interior in fluid communication with the second inner lumen extending within the distal

shaft portion.

2. (Pending) The balloon dilatation catheter of claim 1 wherein the polymeric

material is a linear aromatic polymer.

3. (Pending) The balloon dilatation catheter of claim 2 wherein the linear

aromatic polymer is selected from the group consisting of polyetheretherketone,

polyetherketone, polyketone, polyethereketoneketone, polyaryletherketone, polysulfone

and polyether sulfone.

4. (Pending) The balloon dilatation catheter of claim 1 wherein the polymeric

material of the proximal catheter shaft has a tensile strength greater than about 14,000

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psi, an elongation greater than about 60% and a tensile modulus greater than about

400,000 psi.

5. (Pending) The balloon dilatation catheter of claim 1 wherein the proximal

catheter shaft portion has an outer tubular member and an inner tubular member which

is disposed within the outer tubular member and which defines with the outer tubular

member the first inner lumen extending therein, at least one of the inner and the outer

tubular members being formed of the extruded engineering thermoplastic polymeric

material.

6. (Pending) The balloon dilatation catheter of claim 1 wherein the relatively stiff

proximal catheter shaft portion includes a relatively flexible distal shaft portion.

7. (Pending) The balloon dilatation catheter of claim 1, wherein the polymeric

material is a polyetheretherketone.

8. (Pending) The balloon dilatation catheter of claim 4, wherein the polymeric

material is a polyetheretherketone.

9. (Pending) The balloon dilatation catheter of claim 5, wherein the polymeric

material is a polyetheretherketone.

10. (Pending) The balloon dilatation catheter of claim 6, wherein the polymeric

material is a polyetheretherketone.

11. (Pending) The balloon dilatation catheter of claim 1, wherein the proximal

catheter shaft portion includes an outer tubular member made of the polymeric material.

12. (Pending) The balloon dilatation catheter of claim 11, wherein the proximal

material is a polyetheretherketone.

- 13. (Pending) The balloon dilatation catheter of claim 5, wherein the outer tubular member is made of the polymeric material.
- 14. (Pending) The balloon dilatation catheter of claim 13, wherein the polymeric material is a polyetheretherketone.
  - 15. (Pending) The balloon dilatation catheter of claim 1, wherein:
- a) the polymeric material is a polyetheretherketone having a tensile strength greater than about 14,000 psi, an elongation greater than about 60 and a tensile modulus greater than about 400,000 psi; and
- b) the proximal catheter shaft portion has an outer tubular member and an inner tubular member which is disposed within the outer tubular member and which defines with the outer tubular member the first inner lumen extending therein, at least one of the inner and the outer tubular members being formed of the polyetheretherketone.
- 16. (Pending) The balloon dilatation catheter of claim 1 sized and having the flexibility and pushability required for use as a dilatation catheter for percutaneous transluminal coronary angioplasty.
- 17. (Pending) The balloon dilatation catheter of claim 16, wherein the polymeric material is a polyetheretherketone.
- 18. (Pending) An intraluminal catheter for percutaneous insertion and transluminal advancement into a patient's vasculature, the catheter having a shaft comprising:
  - a) a proximal shaft portion formed at least in part of an extruded thermoplastic polymeric material with a tensile strength greater than 10,000 psi; and
  - b) a distal shaft portion that is more flexible than the proximal shaft portion.

19. (Pending) The catheter of claim 18, wherein the polymeric material is a

polyetheretherketone.

20. (Pending) The intraluminal catheter of claim 18, wherein the extruded

thermoplastic polymeric material has an elongation greater than 50%.

21. (Pending) The catheter of claim 20, wherein the polymeric material is a

polyetheretherketone.

22. (Pending) The catheter of claim 18, further comprising a lumen extending

at least in the distal shaft portion.

23. (Pending) The catheter of claim 22, further comprising a second lumen in

the catheter shaft adapted to receive a guidewire, the second lumen extending from a

distal port in the distal end of the catheter to a proximal guidewire port proximal of the

distal guidewire port.

24. (Pending) The catheter of claim 22, further comprising an expandable

dilatation balloon carried by the shaft, wherein the lumen directs inflation fluid to the

dilatation balloon.

25. (Pending) The catheter of claim 24, wherein the lumen has a proximal

end for receiving inflation fluid and a distal end for directing inflation fluid to the balloon.

26. (Pending) The catheter of claim 18, wherein the shaft has an inner tubular

member and an outer tubular member, at least one of the inner and the outer tubular

members having a proximal portion formed of the extruded thermoplastic polymeric

material.

- 27. (Pending) The catheter of claim 26 wherein the polymeric material is a polyetheretherketone.
- 28. (Pending) The catheter of claim 26, wherein the proximal portion of the outer tubular member is made of the extruded thermoplastic polymeric material.
- 29. (Pending) The catheter of claim 28 wherein the extruded thermoplastic polymeric material is a polyetheretherketone.
- 30. (Pending) The catheter of claim 28, wherein a distal portion of the outer tubular member is made of a material more flexible than the extruded thermoplastic polymeric material.
- 31. (Pending) The catheter of claim 18, wherein the extruded thermoplastic polymeric material has a tensile modulus greater than 300,000 psi.
- 32. (Pending) The catheter of claim 31, wherein the polymeric material is a polyetheretherketone.
- 33. (Pending) The catheter of claim 18, wherein the extruded thermoplastic polymeric material has a tensile modulus greater than about 400,000 psi.
- 34. (Pending) The catheter of claim 33, wherein the polymeric material is a polyetheretherketone.
- 35. (Pending) The catheter of claim 18, wherein the extruded thermoplastic polymeric material has a tensile strength greater than about 14,000 psi.
- 36. (Pending) The catheter of claim 35, wherein the polymeric material is a polyetheretherketone.

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37. (Pending) The catheter of claim 18, wherein the extruded thermoplastic

polymeric material has an elongation greater than about 60%.

38. (Pending) The catheter of claim 37, wherein the polymeric material is a

polyetheretherketone.

39. (Pending) The catheter of claim 18, wherein the polymeric material has

an elongation greater than 50% and a tensile modulus greater than 300,000 psi.

40. (Pending) The catheter of claim 39, wherein the polymeric material is a

polyetheretherketone.

41. (Pending) The catheter of claim 18, wherein the polymeric material is a

polyetheretherketone having a tensile strength greater than about 14,000 psi, an

elongation greater than about 60%, and a tensile modulus greater than about 400,000

psi.

42. (Pending) The catheter of claim 41, wherein the polymeric material is a

polyetheretherketone.

43. (Pending) The catheter of claim 18, sized and having the flexibility and

pushability required for percutaneous transluminal coronary angioplasty.

44. (Pending) The catheter of claim 43, wherein the polymeric material is a

polyetheretherketone.

45. (Pending) The catheter of claim 18, sized and having the kink-resistance

required for percutaneous transluminal coronary angioplasty.

- 46. (Pending) The catheter of claim 45, wherein the polymeric material is a polyetheretherketone.
- 47. (Pending) The catheter of claim 18, sized and having the flexibility, pushability, and kink-resistance required for percutaneous transluminal coronary angioplasty.
- 48. (Pending) The catheter of claim 47, wherein the polymeric material is a polyetheretherketone.
- 49. (Pending) The catheter of claim 18, wherein the shaft is about 120 to about 150 cm in length.
- 50. (Pending) The catheter of claim 49, wherein the polymeric material is a polyetheretherketone.
- 51. (Pending) The catheter of claim 18, wherein the proximal shaft portion comprises an extruded tubular member of the extruded thermoplastic polymeric material.
- 52. (Pending) The catheter of claim 51, wherein the polymeric material is a polyetheretherketone.
- 53. (Pending) An intraluminal catheter for percutaneous insertion and transluminal advancement into a patient's vasculature, the catheter having a shaft comprising:
  - a) a proximal shaft portion formed at least in part of an extruded thermoplastic polymeric material with a tensile modulus greater than 300,000 psi; and
  - b) a distal shaft portion that is more flexible than the proximal shaft portion.

- 54. (Pending) The catheter of claim 53, wherein the polymeric material is a polyetheretherketone.
- 55. (Pending) The catheter of claim 53, wherein said extruded thermoplastic polymeric material has an elongation greater than 50%.
- 56. (Pending) The catheter of claim 55, wherein the polymeric material is a polyetheretherketone.
- 57. (Pending) An intraluminal catheter for percutaneous insertion and transluminal advancement into a patient's vasculature, the catheter having a shaft comprising:
  - a) a proximal shaft portion formed at least in part of an extruded thermoplastic polymeric material with an elongation greater than 50% and a tensile modulus greater than 400,000 psi; and
  - b) a distal shaft portion that is more flexible than the proximal shaft portion.
- 58. (Pending) The catheter of claim 57, wherein said extruded thermoplastic polymeric material comprises a polyetheretherketone.
- 59. (Pending) The catheter of claim 57, wherein said extruded thermoplastic polymeric material has an elongation greater than about 60%.
- 60. (Pending) The catheter of claim 59, wherein said extruded thermoplastic polymeric material comprises a polyetheretherketone.
- 61. (Pending) The catheter of claim 59, wherein said extruded thermoplastic polymeric material has a tensile strength greater than 10,000 psi.

- 62. (Pending) The catheter of claim 61, wherein said extruded thermoplastic polymeric material comprises a polyetheretherketone.
- 63. (Pending) The catheter of claim 59, wherein said extruded thermoplastic polymeric material has a tensile strength greater than 14,000 psi.
- 64. (Pending) The catheter of claim 63, wherein said extruded thermoplastic polymeric material comprises a polyetheretherketone.